#### **Project Summary**

#### I. INTRODUCTION

This source has applied for a revised Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

Caterpillar Inc. – East Peoria (TTTD & TBU) is located at 901 West Washington Street, East Peoria. This facility produces track-type tractors and transmissions for earth moving equipment. The modern facility is located on 700 acres and consists of seven major structures and approximately 150 acres under roof.

Track-type tractor and transmission components including machined parts, engines, hydraulic components, and electronics controls and systems are shipped to the facility for inclusion in the assembly process. Raw materials including steel plate, bar stock, castings, and forgings are also delivered to the facility and processed into completed sub-assemblies that are supplied to the final assembly process. Operations include shot blasting, metal forming, machining, heat treating, and coating. Following final assembly, the track-type tractors and transmissions are painted prior to shipment.

Natural gas-fired boilers are operated on site to provide process steam and some plant heating. Direct fired natural gas make-up air units are also operated for plant heating purposes. Several diesel engine powered electric generators are located throughout the facility to provide emergency power.

#### II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission		Date	Emission Control
Unit	Description	Constructed	Equipment

Emission		Date	Emission Control
Unit	Description	Constructed	Equipment
Unit 01	Coating Operations:		
	Prime/Top (SS)	4/77	Dry Filter
	Touch-Up (SS)	4/77	Dry Filter
	Prime/Top (LL)	2/95	Waterwall
	Touch-Up (LL)	1986	Dry Filter
	Special Color (LL)	1982	Dry Filter
	Transmission (KK)	8/79	Waterwall
	E-coating (Prime/Top)	2/95	None

Emission		Date	Emission Control
Unit	Description	Constructed	Equipment
Unit 02	Paint Pigment Reclamation	6/95	3 Dust Collectors,
	System		2 Filter Boxes
Unit 03	Solvent Still	4/97	None
Unit 04	4,750 Gallon Paint storage	1975	Permanent Submerged
	Tank		Loading Pipe
Unit 05	Natural Gas Fired Boilers:		
	Boiler 23 – 90 MBtu/hr		
		1990	None
	Boiler 11 (FD 6) – 25.1	0.40=	
	MBtu/hr	8/97	None
	D 1 12 (FD 7) 25 1		
	Boiler 12 (FD-7) – 25.1	0/07	Nama
	MBtu/hr	8/97	None
	Boiler 5 – 31.4 MBtu/hr		
	Bollet 3 – 31.4 MBtu/III	8/98	None
	Boiler 6 – 31.4 MBtu/hr	0/70	rvone
	Boner o 31.1 WiBta/iii	8/98	None
	Boiler 7 – 31.4 MBtu/hr	0/70	TYONG
		8/98	None
	Boiler 8 - 37.7 MBtu/hr		
		8/98	None
	Boiler 9 – 37.7 MBtu/hr		
		8/98	None
	Boiler KK – 12.5 MBtu/hr		
		8/98	None

Emission		Date	Emission Control
Unit	Description	Constructed	Equipment
Unit 06	Diesel Generators:		
	CC3 W2 – Rated Output 1939 kW, 2598 hp	12/94	None
	HH – Rated Output 1350 kW, 1809 hp	9/90	None
	AD 6 – Rated Output 1468 kW, 1967 hp	1984	None
	AD 7 – Rated Output 1468 kW, 1967 hp	1984	None
	AD 8 – Rated Output 1903 kW, 2550 hp	1988	None
Unit 07	Three underground Gasoline Tanks (12,000 gallons each)	6/85	Permanent Submerged Loading Pipes
UNIT 08	Gasoline Storage Tank (15,000 Gallon Capacity)	1975	Submerged Loading Pipe
Unit 09	Soil Vapor Extraction System	August 1991	Vapor Phase Activated Carbon Absorbers
Unit 10	Aeration Tanks 1 and 2, Air Stripper	April 1997	Vapor Phase Activated Carbon Absorber
Unit 11	Fugitive Emissions from Paved Roads		
Unit 12	Acid Etch – HH	August, 2001	None
Unit 13	Acid Etch – KK	1990	None

## III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

# Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	319

Sulfur Dioxide (SO <sub>2</sub> )	2
Particulate Matter (PM)	27
Nitrogen Oxides (NO <sub>x</sub> )	292
HAP, not included in VOM or PM	
Total	640

This permit is a combined Title I/CAAPP permit that may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

#### IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

#### V. PROPOSED PERMIT

#### **CAAPP**

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

#### Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

### VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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